

**STATE OF SOUTH CAROLINA****(Caption of Case)****In Re:****Application of Duke Energy Carolinas, LLC  
For Authority to Adjust and Increase Its Electric  
Rates and Charges****BEFORE THE  
PUBLIC SERVICE COMMISSION  
OF SOUTH CAROLINA****COVER SHEET****DOCKET****NUMBER: 2009 - 226 - E****(Please type or print)****Submitted by: Charles A. Castle****SC Bar Number: 79895****Address: 526 S. Church Street, EC03T****Telephone: 704-382-4499****Charlotte, NC 28202****Fax: 704-382-4494****Other: \_\_\_\_\_****Email: alex.castle@duke-energy.com**

NOTE: The cover sheet and information contained herein neither replaces nor supplements the filing and service of pleadings or other papers as required by law. This form is required for use by the Public Service Commission of South Carolina for the purpose of docketing and must be filled out completely.

**DOCKETING INFORMATION** (Check all that apply)☐ **Emergency Relief demanded in petition**☐ **Request for item to be placed on Commission's Agenda expeditiously**☐ **Other: \_\_\_\_\_****INDUSTRY (Check one)****NATURE OF ACTION (Check all that apply)**☒ **Electric**☐ **Affidavit**☒ **Letter**☒ **Request**☐ **Electric/Gas**☐ **Agreement**☐ **Memorandum**☐ **Request for Certificatio**☐ **Electric/Telecommunications**☐ **Answer**☐ **Motion**☐ **Request for Investigator**☐ **Electric/Water**☐ **Appellate Review**☐ **Objection**☐ **Resale Agreement**☐ **Electric/Water/Telecom.**☐ **Application**☐ **Petition**☐ **Resale Amendment**☐ **Electric/Water/Sewer**☐ **Brief**☐ **Petition for Reconsideration**☐ **Reservation Letter**☐ **Gas**☐ **Certificate**☐ **Petition for Rulemaking**☐ **Response**☐ **Railroad**☐ **Comments**☐ **Petition for Rule to Show Cause**☐ **Response to Discovery**☐ **Sewer**☐ **Complaint**☐ **Petition to Intervene**☐ **Return to Petition**☐ **Telecommunications**☐ **Consent Order**☐ **Petition to Intervene Out of Time**☐ **Stipulation**☐ **Transportation**☐ **Discovery**☐ **Prefiled Testimony**☐ **Subpoena**☐ **Water**☐ **Exhibit**☐ **Promotion**☐ **Tariff**☐ **Water/Sewer**☐ **Expedited Consideration**☐ **Proposed Order**☐ **Other:**☐ **Administrative Matter**☐ **Interconnection Agreement**☐ **Protest**☐ **Other:**☐ **Interconnection Amendment**☐ **Publisher's Affidavit**☐ **Late-Filed Exhibit**☐ **Report**

**BEFORE**  
**THE PUBLIC SERVICE COMMISSION OF**  
**SOUTH CAROLINA**

In re:	)	
Application of Duke Energy Carolinas, LLC	)	<b>DUKE ENERGY CAROLINAS,</b>
For Authority to Adjust and Increase Its	)	<b>LLC'S REQUEST FOR APPROVAL</b>
Electric Rates and Charges	)	<b>OF EE VINTAGE 0 REVENUE</b>
	)	<b>REQUIREMENT</b>

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In accordance with the Public Service Commission of South Carolina's ("the Commission") Order No. 2009-336 in Docket No. 2009-166-E and Order No. 2010-79 in Docket No. 2009-226-E, and the Settlement Agreement by and among Duke Energy Carolinas, LLC ("the Company"), the South Carolina Office of Regulatory Staff, South Carolina Energy Users Committee, and the Southern Environmental Law Center, the Company hereby requests that the Commission approve its application to recover costs deferred in connection with the implementation of its Energy Efficiency ("EE") Programs. The application reflects actual revenue requirements for the Company's EE and demand side management ("DSM") programs and recovers (a) revenues for Vintage 0 equal to 75% of the Company's avoided capacity costs applicable to DSM programs and 55% of the net present value ("NPV") avoided capacity and energy costs applicable to EE programs; and (b) lost revenues for EE programs only. Vintage 0 reflects the period of June 2009 through January 31, 2010, for which the Commission approved a deferral costs until a recovery mechanism was determined.

In support of its application, the Company states as follows:

1. The cost to be recovered for the Vintage 0 period is \$2,135,128 from residential customers and \$2,115,825 from non-residential customers. The various components comprising this amount are located in Exhibits 1-7 of this application. Per Order No. 2010-79 in Docket No. 2009-226-E, Vintage 0 shall be applied as an offset to the existing balance of DSM costs owed to customers rather than billed to customers under the Rider EE. Exhibit 7 illustrates the amounts to be apportioned to the existing DSM balance in accordance with the class of customers. See Order No. 2010-79, p. 13<sup>1</sup>
2. The Vintage 0 period includes the following items:
  - a. Avoided cost revenue requirements to reflect actual participation and information related to the kW and kWh savings for the EE and DSM programs offered during Vintage 0.
  - b. Lost revenues for thirty-two of the thirty-six months of Vintage 0 to reflect current SC retail rates and to reflect the primary rate schedules for which kWh savings are being achieved. Lost revenues for February 1, 2010 to May 31, 2010, which the Company will seek to collect through the base rate case to be filed in 2011, are excluded.
  - c. Earnings cap calculation to reflect actual earnings based upon a percentage of program costs compared to those earned through avoided costs revenues.

Based on the foregoing, the Company respectfully requests that the Commission grant its application seeking approval of its Vintage 0 Revenue Requirement as described herein

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<sup>1</sup> The Company expects the balances for residential, general and industrial to drop to zero by the end of 2012.

and in the attached exhibits. Additionally, the Company requests that in accordance with S.C. Code Ann. §58-27-870(F), the Commission allow the proposed rate to be put into effect without notice and hearing. The proposed rate does not require a determination of the entire rate structure and overall rate of return, and will facilitate an orderly rate administration.

Dated this 24<sup>th</sup> day of January, 2011.



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**Duke Energy Carolinas**  
DSM/EE Cost Recovery Rider 0  
Docket Number  
Calculation of Actual Revenue Requirement Vintage 0

**Residential Revenue Requirement:**

		Vintage 0 Total SC Retail Costs
1 EE Avoided Cost Component	Exhibit 2, Line 9	\$ 1,389,240
2 DSM Avoided Cost Component	Exhibit 2, Line 17	\$ 987,848
3 Residential Avoided Cost Revenue Requirement	Line 1 + Line 2	\$ 2,377,088
4 Gross Receipts Tax and Regulatory Fee Factor		1.004581
5 Adjusted Residential Avoided Cost Revenue Requirement	Line 3 * Line 4	\$ 2,387,978
6 Lost Revenues Vintage 0 (32 months)*	Exhibit 2, Line 10	\$ 403,190
7 Residential Save-A-Watt Revenue Requirement	Line 5 + Line 6	\$ 2,791,168

**Non-Residential Revenue Requirement:**

		Vintage 0 Total SC Retail Costs
1 EE Avoided Cost Component	Exhibit 2, Line 11	\$ 1,562,171
2 DSM Avoided Cost Component	Exhibit 2, Line 18	\$ 1,402,688
3 Non-Residential Avoided Cost Revenue Requirement	Line 1 + Line 2	\$ 2,964,859
4 Gross Receipts Tax and Regulatory Fee Factor		1.004581
5 Adjusted Non-Residential Avoided Cost Revenue Requirement	Line 3 * Line 4	\$ 2,978,441
6 Lost Revenues Vintage 0 (32 months)*	Exhibit 2, Line 12	\$ 47,188
7 Non-Residential Save-A-Watt Revenue Requirement	Line 5 + Line 6	\$ 3,025,628

\* Feb 2012-May 2012 Lost Revenues to be included in filing for 2012 Base Rate Case

**Earnings Cap Calculation**

1 Earnings (in excess of cap)	Exhibit 6, Line 30	\$ (609,492)
2 Gross Up of Earnings to Pre-Tax	Line 1 / .39176	\$ (1,555,778)
3 Gross up of Pre-Tax Earnings for Gross Receipts Tax and Regulatory Fee	Line 2 * 1.004581	\$ (1,562,905)
<b>4 Amount to be applied to DSM Deferral Balance</b>	Line 7 + Line 7 + Line 3	<b>\$ 4,253,891</b>

**Duke Energy Carolinas**  
**DSM/EE Cost Recovery Rider 0**  
**Docket Number**

**Save-A-Watt Revenue Requirement Support Data**

Allocation 1 to state based on kWh sales		
1 SC Retail	Exhibit 3	26.9121760%
Allocation 2 to state based on peak demand		
2 SC Retail	Exhibit 3	26.0829094%
Allocation 3 SC res vs. non-res peak demand		
3 SC Residential	Exhibit 3	41.3232886%
4 Non-Residential	Exhibit 3	58.6767114%
<b>System Revenue Requirement for Energy Efficiency Programs</b>		Vintage 0
5 Residential Avoided Costs - EE	Exhibit 5	\$ 5,162,125
6 Residential Lost Revenues - EE	Exhibit 5	\$ 1,498,171
7 Non-Residential Avoided Costs - EE	Exhibit 5	\$ 5,804,699
8 Non-Residential Lost Revenues - EE	Exhibit 5	\$ 175,340
Total EE		\$ 12,640,334
Allocation of Total EE to SC Retail	Sum (Line 8:Line 8) * Line 1	\$ 3,401,789
Allocation to SC Retail Broken Down by Class and Type		Vintage 0
9 Residential Avoided Costs - EE	Line 5 * Line 1	\$ 1,389,240
10 Residential Lost Revenues - EE	Line 6 * Line 1	\$ 403,190
11 Non-Residential Avoided Costs - EE	Line 7 * Line 1	\$ 1,562,171
12 Non-Residential Lost Revenues - EE	Line 8 * Line 1	\$ 47,188
Total	Sum Lines 9 - 12	\$ 3,401,789
<b>System Revenue Requirements for DSM Programs</b>		Vintage 0
13 Residential Avoided Costs - DSM	Exhibit 5	\$ 3,066,226
14 Non-Residential Avoided Costs - DSM	Exhibit 5	\$ 6,098,917
15 Total DSM	Line 13 + Line 14	\$ 9,165,143
Allocation of Total DSM to SC Retail		
16 Total DSM	Line 15 * Line 2	\$ 2,390,536
Allocation to Residential vs. Non Residential		
17 Residential Avoided Cost - DSM	Line 16 * Line 3	\$ 987,848
18 Non - Residential Avoided Cost - DSM	Line 16 * Line 4	\$ 1,402,688
	Line 17 + Line 18	\$ 2,390,536

Duke Energy Carolinas  
DSM/EE Cost Recovery Rider 0

**Allocation Factors**

**KWH SALES ALLOCATOR: Source 2009 COS Study**

	Percent of System	Percent of Retail
NC Retail Sales Allocation	69.118573%	73.007611%
SC Retail Sales Allocation*	25.478593%	26.912176%
Greenwood Retail Sales Allocation	0.075940%	
Total Retail	94.673106%	

**PEAK DEMAND ALLOCATOR: Source 2009 COS Study**

	Percent of System	Percent of Retail	Percent of State
NC Peak Demand Allocation	70.103905%		
SC Peak Demand Allocation			
Residential	10.235875%		41.3232886%
Non-residential	14.534358%		58.6767114%
Greenwood	0.093154%		
Wholesale Peak Demand Allocation	5.032709%		
System Peak Demand	100.0000000%		100.0000000%
NC Peak Demand Allocation	70.103905%	73.8190004%	
SC Retail Peak Demand Allocation	24.770233%	26.0829094%	
Greenwood	0.09315%		
Total Retail	94.9672914%		

## DSM/EE Cost Recovery Rider 0

<b>Program Costs</b>					
(in thousands)					
	<b>A</b>	<b>B</b>	<b>C</b>		
	<b>Total System Costs</b>	<b>SC Retail kWh Sales</b>	<b>SC Allocated Costs</b>	<b>Residential</b>	<b>Non- Residential</b>
Energy Efficiency (EE) Programs:					
1 Residential Energy Assessments	1,744,324		469,436	469,436	
2 Residential Smart Saver	2,434,706		655,232	655,232	
3 Low Income Services	73,674		19,827	19,827	
4 Energy Efficiency Education Schools Program	1,980,369		532,960	532,960	
5 Nonresidential Energy Assessments	196,655		52,924		52,924
6 Nonresidential Smart Saver	2,000,201		538,298		538,298
7 Oversight of EE programs	1,188,178		319,764	103,080	216,684
8 Subtotal EE Program Costs	9,618,107	26.9121760%	2,588,442		
		<b>SC Retail Peak Demand</b>			
Demand-Side Management (DSM) Programs:					
8 Power Manager	2,053,222		535,540		
9 Power Share	929,399		242,414		
10 Oversight of DSM programs	526,373		137,293		
Subtotal DSM Program Costs	3,508,994	26.0829094%	915,248	378,210	537,037
<b>11 Total EE &amp; DSM Program Costs</b>	<b>13,127,101</b>		<b>3,503,690</b>	<b>2,158,746</b>	<b>1,344,943</b>



## Exhibit 5

**Duke Energy Carolinas**  
**DSM/EE Cost Recovery Rider 0**  
Docket Number  
Load Impact, Costs and Net Lost Revenues by Program

			A	B	C	D		
			System Avoided Costs	System Lost Revenues	SC Allocation Factor Allocation based on kWh sales Exhibit 4	SC Allocation Factor Exhibit 4	SC Residential Avoided Costs	SC Residential Lost Revenues
<b>Residential Programs</b>	<b>SC kW - Summer Peak</b>	<b>SC-Energy Reduction</b>	<b>55%</b>	<b>Net of Variable O&amp;M</b>				
1 Residential Energy Assessments	559	5,061,341	\$ 2,237,221	\$ 709,227	0.269121760	A1 * C1	\$ 602,085	\$ 190,868
2 Smart Saver* for Residential Customers	517	4,536,584	\$ 2,463,268	\$ 635,695	0.269121760	A2 * C2	\$ 662,919	\$ 171,079
3 Low Income Energy Efficiency and Weatherization Assistance	67	653,666	\$ 270,516	\$ 91,596	0.269121760	A3 * C3	\$ 72,802	\$ 24,650
4 Energy Efficiency Education Program for Schools	58	439,985	\$ 191,120	\$ 61,654	0.269121760	A4 * C4	\$ 51,435	\$ 15,592
5 Total for Residential Conservation Programs			\$ 5,162,125	\$ 1,498,171			\$ 1,389,240	\$ 403,190
			75%		Allocation based on Peak Demand	Allocation Residential vs. Non-Residential Peak Demand		
6 Power Manager	13,671		\$ 3,066,226		0.260829094	0.413232886 (A6 +A15) *C6 *D6	\$ 987,848	
7 Total Residential			\$ 8,228,351				\$ 2,377,088	
			System Avoided Costs	System Lost Revenues	SC Allocation Factor Allocation based on kWh sales Exhibit 4	Exhibit 4	SC Non-Residential Avoided Costs	SC Non-Residential Lost Revenues
<b>Non-Residential Programs</b>	<b>SC kW - Summer Peak</b>	<b>SC-Energy Reduction</b>	<b>55%</b>	<b>Net of Variable O&amp;M</b>				
8 Smart Saver* for Non-Residential Customers Lighting	1,708	6,638,648	\$ 5,015,249	\$ 159,073	0.269121760	A8 * C8	\$ 1,349,713	\$ 42,810
9 Smart Saver* for Non-Residential Customers Motors	53	273,529	\$ 293,761	\$ 6,291	0.269121760	A9 * C9	\$ 79,057	\$ 1,693
10 Smart Saver* for Non-Residential Customers - Other Prescriptive	-	-	\$ -	\$ -	0.269121760	A10 * C10	\$ -	\$ -
11 Smart Saver* for Non-Residential Customers - Energy Star Food Service Products	18	94,465	\$ 90,596	\$ 2,159	0.269121760	A11 * C11	\$ 24,381	\$ 581
12 Smart Saver* for Non-Residential Customers - HVAC	88	254,439	\$ 372,795	\$ 6,449	0.269121760	A12 * C12	\$ 100,327	\$ 1,736
13 Smart Saver* for Non-Residential Customers - Custom Rebate	5	64,387	\$ 32,298	\$ 1,368	0.269121760	A13 * C13	\$ 8,692	\$ 368
14 Total for Non-Residential Conservation Programs			\$ 5,804,699	\$ 175,340			\$ 1,562,171	\$ 47,188
			75%		Allocation based on Peak Demand	Allocation Residential vs. Non-Residential Peak Demand		
15 Power Share	27,193		\$ 6,098,917		0.260829094	0.586767114 (A6 +A15) *C15 *D15	\$ 1,402,688	
16 Total Non-Residential			\$ 11,903,616				\$ 2,964,859	

**System Level Earnings Cap Calculation Vintage 0**  
**Total for Conservation Programs**

			A	B	C	D	E
		Res		Non Res	Total		
1 AC Revenues-55%	Exhibit 5	\$	5,162,125	\$	5,804,699	\$	10,966,824
2 Program Costs	Exhibit 4	\$	6,616,097	\$	3,002,010	\$	9,618,107
3 Avoided Costs -100%	Exhibit 5	\$	9,385,682	\$	10,553,998	\$	19,939,680
4 kW	Exhibit 5		1,201		1,872		3,073
5 kWh	Exhibit 5		10,691,576		7,325,468		18,017,044
6 Income Before Taxes	Line 1 - Line 2	\$	(1,453,972)	\$	2,802,689	\$	1,348,717
7 Income Taxes	Line 6 * .39176	\$	(569,608)	\$	1,097,982	\$	528,373
8 Net Income	Line 6 - Line 7	\$	(884,364)	\$	1,704,708	\$	820,344
<b>Total for DSM Programs</b>							
		Res		Non Res	Total		
9 AC Revenues-75%	Exhibit 5	\$	3,066,226	\$	6,098,917	\$	9,165,143
10 Program Costs	Exhibit 4	\$	2,053,222	\$	1,455,772	\$	3,508,994
11 Avoided Costs -100%	Exhibit 5	\$	4,088,301	\$	8,131,889	\$	12,220,191
12 kW	Exhibit 5		13,671		27,193		40,864
13 kWh	Exhibit 5						-
14 Income Before Taxes	Line 9 - Line 10	\$	1,013,004	\$	4,643,145	\$	5,656,149
15 Income Taxes	Line 14 * .39176	\$	396,854	\$	1,818,998	\$	2,215,853
16 Net Income	Line 14 - Line 15	\$	616,150	\$	2,824,147	\$	3,440,296
<b>Total for SAW Programs Adjusted for DSM Cap</b>							
		Res		Non Res	Total	Res	Non Res
17 AC Revenues	Line 1 + Line 9	\$	8,228,351	\$	11,903,616	\$	20,131,967
18 Program Costs	Line 2 + Line 10	\$	8,669,319	\$	4,457,782	\$	13,127,101
19 Avoided Costs	Line 3 + Line 11	\$	13,473,983	\$	18,685,888	\$	32,159,871
20 kW	Line 4 + Line 12		14,872		29,065		43,937
21 kWh	Line 5 + Line 13		10,691,576		7,325,468		18,017,044
22 Income Before Taxes	Line 17 - Line 18	\$	(440,968)	\$	7,445,834	\$	7,004,866
23 Income Taxes	Line 22 * .39176	\$	(172,754)	\$	2,916,980	\$	2,744,226
24 Net Income	Line 22 - Line 23	\$	(268,214)	\$	4,528,854	\$	4,260,640
25 Percent DSM Avoided Cost to Total Avoided Cost (A)	Line C11 / Line C19					38%	
26 Percent Conservation Avoided Cost to Total Avoided Cost	Line C3 / Line C19					62%	
27 Earnings Cap: Allowed Return on Program Costs	C18 * 15%				\$	1,969,065	
28 System Earnings in Excess of Program Costs	Line C24 - Line C27				\$	2,291,575	
29 SC Allocation	(Exhibit 2, Line 1 * Line 26) + (Exhibit 2, Line 2 * Line 25)					26.5971%	
30 Excess Earnings to be netted against VD Revenue Requirement	Line 28 * Line 29				\$	609,492	

(A) No Adjustment required since DSM avoided costs percent is less than 40%

Duke Energy Carolinas  
DSM/EE Cost Recovery Rider 0  
Docket Number  
Calculation of Application to old DSM Balance

<b>1 Total Amount of Vintage 0 to be Applied to Old DSM Balance</b>	Exhibit 1, Line 7 Residential + Line 7 Non-Residential	\$	<b>5,816,796</b>
<b>2 Amount to be Applied to Residential Balance for EE and DSM Programs</b>	Exhibit 1, Line 7 - Residential	\$	<b>2,791,168</b>
<b>3 Amount to be Applied to Non-Residential Balance for EE Programs</b>	Exhibit 1, (Line 1 * Line 4) + Line 6 - Non-Residential	\$	<b>1,616,515</b>
<b>4 Amount to be Applied to Industrial for EE Programs</b>	Line 3 * Line A1	\$	<b>930,280</b>
<b>5 Amount to be Applied to General for EE Programs</b>	Line 3 * Line A2	\$	<b>658,814</b>
<b>6 Amount to be Applied to Lighting for EE Programs</b>	Line 3 * Line A3	\$	<b>27,421</b>
<b>7 Amount to be Applied to Non-Residential Balance for DSM Programs</b>	Exhibit 1 (Line 2 X Line 4)	\$	<b>1,409,114</b>
<b>8 Amount to be Applied to Industrial for DSM Programs</b>	Line 7 * Line A4	\$	<b>719,803</b>
<b>9 Amount to be Applied to General for DSM Programs</b>	Line 7 * Line A5	\$	<b>689,009</b>
<b>10 Amount to be Applied to Lighting for DSM Programs</b>	Line 7 * Line A6	\$	<b>301</b>
<b>11 Total Amount of Earnings Cap to be Applied to Old DSM Balance</b>	Exhibit 1	\$	<b>(1,562,905)</b>
11a Residential percent of Avoided Cost	Line 11 * Exhibit 6 D19	\$	<b>(654,809)</b>
11b Non-Residential percent of Avoided Cost	Line 11 * Exhibit 6 E19	\$	<b>(908,097)</b>
11c Industrial percent of kWh sales	Line 11 b * Line A1	\$	<b>(522,596)</b>
11d General percent of kWh sales	Line 11 b * Line A2	\$	<b>(370,097)</b>
11e Lighting percent of kWh sales	Line 11 b * Line A3	\$	<b>(15,404)</b>
<b>12 Total Amount of Vintage 0 Impacts to be Applied to Residential</b>	Line 2 + Line 11a	\$	<b>2,136,359</b>
<b>13 Total Amount of Vintage 0 Impacts to be Applied to Industrial</b>	Line 4 + Line 8 + Line 11c	\$	<b>1,127,488</b>
<b>14 Total Amount of Vintage 0 Impacts to be Applied to General</b>	Line 5 + Line 9 + Line 11d	\$	<b>977,726</b>
<b>15 Total Amount of Vintage 0 Impacts to be Applied to Lighting</b>	Line 6 + Line 10 + Line 11e	\$	<b>12,318</b>
		\$	<b>4,253,891</b>

Exhibit 7a

kWh Sales Non-Residential Breakdown			kWh Sales HP Breakdown		
	2009 COS	A			
1 Industrial percent of kWh sales	38.997036%	57.548519%	HP	-0.4845624%	(96,172,565)
2 General percent of kWh sales	27.617251%	40.755197%	OPT-G	-0.10365881%	(20,573,478)
3 Lighting percent of kWh sales	1.149466%	1.696284%	G	0.03599634%	7,144,303
	67.76375%	100.00000%	OPT-I	-0.41689993%	(82,743,390)

Peak Demand Non-Residential Breakdown			Peak Demand HP Breakdown		
	2009 COS				
4 Industrial percent of kWh sales	29.973241%	51.082006%	HP	2.9234881%	118,791
5 General percent of kWh sales	28.690944%	48.896645%	OPT-G	0.08190325%	3,328
6 Lighting percent of kWh sales	0.012527%	0.021349%	G	0.02212470%	899
	58.67671%	100.00000%	OPT-I	2.81946015%	114,564